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New Synonymies and Combinations for New World Pselaphinae (Coleoptera: Staphylinidae)¹

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ABSTRACT

The following new synonymies and new combinations for Pselaphinae of North and Central America are documented: *Anarmodius aequinoctialis* (Motschulsky) (*Trichonyx*), New Comb.; *Anthylarthron cornutum* (Brendel) (= *Anthylarthron curtipenne* Casey, New Syn.); *Aporhexius robustus* (Motschulsky) (*Euplectus*), New Comb.; *Batrisodes punctifrons* Casey (= *Batrisodes appalachianus* Casey, New Syn.); *Batrisodes ionae* (LeConte) (= *Batrisodes caseyi* Blatchley, New Syn.); *Batrisodes clypeonotus* (Brendel) (= *Batrisodes kahli* Bowman, New Syn.); *Batrisodes lineaticollis* (Aubé) (= *Batrisus globosus* LeConte, New Syn.); *Brachygluta corniventris* (Motschulsky) (*Bryaxis*), New Comb., (= *Bryaxis illinoiensis* Brendel, New Syn.); *Cedius zieglerei* LeConte (= *Cedius robustus* Casey, New Syn.); *Conoplectus simplex* (Motschulsky) (*Rhexius*), New Comb., jun. syn. of *Conoplectus canaliculatus* (LeConte), New Syn.; *Ctenisodes Raffray* (= *Pilopius* Casey, New Syn.); *Cylindrarctus ludovicianus* (Brendel) (= *Cylindrarctus comes* Casey, New Syn.; *Dalmosanus* Park (= *Pygmactium* Grigarick and Schuster, New Syn.); *Decarthron consanguineum* (Motschulsky) (*Bryaxis*), New Comb.; *Decarthron formiceti* (LeConte) (= *Decarthron rayi* Park, = *Decarthron seriepunctatum* Brendel, New Syn.); *Decarthron velutinum* (LeConte), New Status (= "*D. formiceti*," Park, 1958); *Decarthron marinum* Brendel (= *Decarthron diversum* Park, New Syn.); *Decarthron robustum* (Motschulsky) (*Metaxis*), New Comb.; *Euphalepsus Reitter* (= *Barada* Raffray, = *Tetrasemus* Jeannel, New Syn.), in subtribe Baradina; *Eupsenius dilatatus* Motschulsky (= *Eupsenius rufus* LeConte, New Syn.); *Eurhexius canaliculatus* (Motschulsky) (*Trichonyx*), New Comb. (= *Eurhexius zonalis* Park, New Syn.); *Harmophola adusta* (Motschulsky) (*Euplectus*), New Comb.; *Iteticus cylindricus* (Motschulsky) (*Batrisus*), New Comb.; *Nisaxis* Casey (= *Dranisaxa* Park, New Syn.); *Oropus striatus* (LeConte) (= *Oropus keeni* Casey and *O. brevipennis* Casey, New Syn.); *Panaramecia tropicalis* (Motschulsky) (*Euplectus*), New Comb. (= *Panaramecia williamsi* Park, New Syn.); *Phamisis Aubé*, (= *Canthoderus* Motschulsky, New Syn.); *Pselaptus oedipus* (Sharp) (*Bryaxis*, *Cryptorhinula*), New Comb.; *Pselaphus bellax* Casey (= *Pselaphus ulkei* Bowman, New Syn.); *Reichenbachia intacta* (Sharp) (= *Bryaxis sarcinaria* Schaufuss, New Syn.); *Reichenbachia pruinosa* (Motschulsky) (*Bryaxis*), New Comb., (= *Bryaxis macrura* Motschulsky, = *Reichenbachia bierigi* Park, New Syn.); *Reichenbachia rubricunda* (Aubé) (= *Bryaxis gemmifer* LeConte, New Syn.); *Trimicerus* Motschulsky, (= *Batrybraxis* Reitter, New Syn.); *Trimicerus cornigera* (Motschulsky) (*Bryaxis*), New Comb. (= *Batrybraxis panamensis* Park, New Syn.); *Trimicerus pacificus* Motschulsky (= *Batrybraxis bowmani* Park, New Syn.); *Trimiomelba dubia* (LeConte) (= *Trimium americanum* Motschulsky, = *Trimium*

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convexulum LeConte, = *Trimiomelba laevis* Casey, New Syn.); *Tyrus humeralis* (Aubé) (= *Tyrus consimilis* Casey, New Syn.); *Tyrus semiruber* Casey (= "*Tyrus humeralis*" of authors); *Tyrus corticinus* Casey (= *Tyrus carinifer* Casey, New Syn.); *Xybarida trimioides* (Sharp) (*Bryaxis*, *Cryptorhinula*), New Comb.

Lectotype designations: *Batrisus ionae* LeConte; *Batrisus globosus* LeConte; *Bryaxis consanguinea* Motschulsky; *Bryaxis corniventris* Motschulsky; *Bryaxis pruinosa* Motschulsky; *Metaxis robusta* Motschulsky; *Rhexius simplex* Motschulsky; *Trimium americanum* LeConte; *Tyrus consimilis* Casey. New species and genera: *Cylindrarctus seminole* Chandler, New Species (= "*Cylindrarctus comes*," Chandler, 1988); *Motschtyrus pilosus* (Motschulsky) (*Tychus*), Panama, New Genus, New Comb.

While working on projects for the last few years, I have visited and borrowed material from the more important North American and European collections of Pselaphinae. Through this I have examined almost all the types of North American Pselaphinae and a good number of those from Mexico and Central America. A number of synonymies and generic misplacements were discovered relevant to my work on faunal analyses in New Hampshire, the recent North American catalog of the Pselaphidae (Chandler, 1997), and a project characterizing the genera of Mexico. These have not yet been published because they were noted while papers were in press, or after papers were published, or are necessary to address problems relevant to projects in progress.

The types of Victor de Motschulsky from Panama and the eastern United States have been particularly problematic due to their previous lack of availability. Motschulsky mentioned many names in three letters to Ms. Ménériés in St. Petersburg (Motschulsky 1854, 1855, 1856), and provided brief comparative notes on many of these. The names that have comparative statements, no matter how brief, have been accepted as valid descriptions. Almost none of these names have been applied since their description, but recently the genera have been listed (Newton and Chandler, 1989) and the Panamanian (Chandler, 1992a) or North American species catalogued (Chandler, 1997). His names are of particular interest because they are often placed in genera that do not occur in the New World, and so are obviously misplaced.

All but three of Motschulsky's North American and Panamanian types have been found and borrowed from the Moscow State University Collection. The missing types also are not present in St. Petersburg or Helsinki, and are believed to be lost or destroyed. They are: *Euplectus antennatus*, *Euplectus cordicollis* (close to *Lithocharis*!, fide Motschulsky 1855:16; may be a non-pselaphine staphylinid), both from Obispo, Panama, and *Bryaxis curvicera* Motschulsky (1854) from New York City. This last species is a member of *Brachygluta*, and is clearly a male from the description, being either *B. luniger* (LeConte) or *B. cavicornis* (Brendel). Both occur in salt marshes near New York City, but a more precise placement cannot be made without the type.

This paper presents the changes in generic placement and new synonymies that I have seen. In most cases, I made extensive notes on the types and the type label data and have labeled specimens in my

collection as "compared with type" when possible, or simply have specimens that I compared favorably with the types but did not copy down the type data. I have designated lectotypes for those taxa where I consider it critical that the name be associated with a male or a definitive specimen, or where there are more than two species present in the syntype series.

Anarmodius aequinoctialis (Motschulsky, 1855) new comb.

The two syntypes of *Trichonyx aequinoctialis* Motschulsky (1855) were examined, and are here transferred to the genus *Anarmodius* Raffray. Type data: // [small light green square]/ Obispo [light green paper]/ *Trichonyx aequinoctialis* Motch. Panama [dark green paper]/ / [ZMUM].

Anthylarthron cornutum (Brendel, 1865)

The lectotype of *Decarthron cornutum* Brendel (1865a) was recently fixed (Chandler, 1994), with a male from Illinois being chosen. This allows the following synonymy to be finally formalized. Casey (1897) described *Anthylarthron curtipenne* from Iowa, based on a male holotype. The types of the two taxa are clearly conspecific, sharing the unique features of the male vertex. NEW SYNONYMY. Type data: / / Iowa/ Casey bequest 1925/ Type USNM 3873/ *curtipenne*// [USNM].

Aporhexius robustus (Motschulsky, 1855), new comb.

The female holotype of *Euplectus robustus* Motschulsky (1855) is a member of *Aporhexius* Raffray, the first record of this South American genus from Central America. Type data: // [small light green square]/ Obispo [light green paper]/ *Euplectus robustus* Motch. Panama [dark green paper]/ / [ZMUM].

I have a single male of this species from Capira, Coclé Province, Panama, which was taken from leaf litter.

Batrisodes (Babnormodes) punctifrons (Casey, 1887)

Casey (1887) described *Batrisodes punctifrons* based on a male from Pennsylvania, and later (Casey, 1908) added *B. appalachianus*, based on a male from Westmoreland County, Pennsylvania. In his description of *appalachianus*, Casey continually compared it with *punctifrons*, finding the two species very close but differing in the thickness of the setae and punctation on the clypeus, and whether the clypeal projection was truncate or more rounded. I have a good series of specimens from Westmoreland and surrounding counties in Pennsylvania which I compared with the types [both at USNM], and found that all features used by Casey could be seen as simple gradation or variation within these series. All other male characters are similar, and I here treat the

two names as representing a single species. NEW SYNONYMY.

***Batrisodes (Elytrodos) ionae* (LeConte, 1849)**

Batrisodes caseyi Blatchley (1910) was described from Posey County, Indiana, with the mention by Blatchley (p. 326) that "Dury has three or four from Kentucky opposite Cincinnati." Park (1947) suspected that *B. caseyi* and *Batrisus ionae* LeConte (1849) might be synonyms, and the type is clearly conspecific with this distinctive species. NEW SYNONYMY. Blatchley's female specimen from Indiana is at Purdue University, and bears the labels: // TYPE/ Posey Co., Ind., W.S.B., 4-26-01/ Purdue Blatchley collection/ *Batrisodes caseyi* Dury 4217// [PURC].

There is also a specimen listed as "type" (Vulinec and Davis, 1984) in the Dury Collection in the Cincinnati Museum of Natural History with the following data: // Ky. near Cin. O./ *Batrisodes caseyi* Dury (Type)/ CMNH E2024/ =*Batrisus ionae* LeConte det. DSChandler '87//. Based on Blatchley's comments (see above), it seems apparent that Blatchley did not really see Dury's material, as he was not sure how many specimens Dury really had, which was probably revealed through correspondence or a visit by Dury. For this reason, the specimen from Purdue is treated as the holotype, and the Dury specimens are not considered to be types.

In LeConte's original material there are single male and female syntypes present, with the male here designated as the LECTOTYPE with this data: // [orange disc] ♂ / Type 6158/ *Batrisus ionae* Lec.//, and the female is here designated as the PARALECTOTYPE [MCZC]. The female has a specimen of the ant, *Lasius alienus* (Förster), mounted on the point.

***Batrisodes (Excavodes) clypeonotus* (Brendel, 1893)**

The male holotype of *Batrisodes kahli* Bowman (1934) was examined, and is conspecific with *Batrisus clypeonotus* Brendel (1893). NEW SYNONYMY. Type data: // Ten./ ♂ / Henry Ulke Beetle Coll. CMNH Acc. No. 1645/ *Batrisus globosus* group n. sp. vide Brendel/ *Batrisodes kahli* bowman TYPE/ HOLOTYPE *Batrisodes kahli* Bowman// [ICCM]. Another synonym of the rarely collected *clypeonotus* was pointed out by Chandler (1992b).

***Batrisodes (Excavodes) lineaticollis* (Aubé, 1833)**

The male holotype of *Batrisus lineaticollis* Aubé (1833) is in the Raffray Collection in Paris [MNHP], and was found to be conspecific with *Batrisus globosus* LeConte (1849), the most commonly collected species of the genus in North America. Type data: // Amer. sept./ *Batrisus* (*Trichonyx*) *lineaticollis* A., Mag. Zool. 1833.50 Amer. bor.// [MNHN]. NEW SYNONYMY. The type series of *B. globosus* is represented by three specimens, with the first here designated as the

LECTOTYPE and bearing the labels: // [pink disc] ♂ / Type 6168/ *B. globosus* Lec.//. The other two are a female and male that are designated as PARALECTOTYPES, and both have a "pink disc" (= northeastern states; type localities are Georgia and Pennsylvania), with the male also labeled with "ant hills, Bedford" and a specimen of the ant *Camponotus castaneus* (Latreille) on the point. Designation of the lectotype fixes the type locality as Pennsylvania.

Aubé's description and figure of this species are clearly similar to *B. globosus*, but for nearly 150 years the two species have not been considered to be close, with *lineaticollis* being placed in a different subgenus (*Declivodes* Park) than *globosus* (*Excavodes* Park). The identity of taxa identified by authors as *lineaticollis* is uncertain, as it has always been difficult to resolve species placement in *Declivodes* using Park's (1947) key. Specimens identified as *lineaticollis* may be members of *B. cartwrighti* Sanderson, or an undescribed species.

***Brachygluta corniventris* (Motschulsky, 1856)**

The three syntypes of *Bryaxis corniventris* Motschulsky (1856) from Mobile, Alabama, are on a single card, and are members of *Brachygluta* Thomson. The most distal specimen is a female that has been largely consumed by dermestid beetles, with the two specimens closest to the pin being in good condition - a female on the left, and a male on the right. Type data: // [small green square]/ *Bryaxis corniventris* m. Am. bor. [dark green paper]/ / [ZMUM]. The male specimen is here selected as the LECTOTYPE, and the two females as PARALECTOTYPES. The features of the male abdomen are clearly visible, and this specimen is conspecific with *Bryaxis illinoiensis* Brendel (1865b), with the latter name now the junior synonym. Type details of *illinoiensis* were discussed by Chandler (1994). NEW SYNONYMY.

***Cedius (Sinistrocedius) zieglerei* LeConte, 1849**

LeConte (1849) based *Cedius zieglerei* on a female holotype from Pennsylvania. Type data: // [pink circle]/ Type 6118/ *Cedius zieglerei* Lec// [MCZC]. Casey (1897) added another species, *C. robustus*, from the District of Columbia, based on a holotype male. The type of *robustus* is a very typical male of *zieglerei*, and *robustus* is here placed as the junior synonym. Type data: // D.C./ Casey bequest 1925/ TYPE USNM 38760/ *robustus*// [USNM]. NEW SYNONYMY.

***Conoplectus canaliculatus* (LeConte, 1849)**

The male and female syntypes of *Rhexius simplex* Motschulsky (1856) from Alabama are found to be conspecific with the widespread and common *Conoplectus canaliculatus* (LeConte) (1849). Type data: / / [small light green square]/ Mobile/ *Rhexius simplex* m. Amer. bor. [dark green paper]/ / [ZMUM]. The head of the male is clearly exposed and diagnostic for this species. NEW SYNONYMY. The male

is here chosen as the LECTOTYPE for this taxon.

Ctenisodes Raffray, 1897

Raffray (April, 1897) described a new genus and species, *Ctenisodes laticeps*, from Nuevo Leon in Mexico, and three months later Casey (June, mailed August, 1897) described the genus *Pilopius* to hold several species from eastern North America. Raffray commented on and later figured (1908, pl. 9, fig. 29) the angulate outer margin of the fourth segment of the maxillary palpi, though it is a bit exaggerated, and didn't find this genus particularly close to *Pilopius* which was thought to have a more rounded outer margin. Park (1942) basically separated the two genera by the more angulate outer margin of the last segment of the maxillary palpi, and the distinct cone-like seta at this angle of *Ctenisodes*.

However, species such as *P. impressipennis* Casey from Texas and others share these features, which are more subtle and gradual than you might believe from Raffray's illustration. I have examined the types of *C. laticeps* and of all North American *Pilopius*, and find the maxillary palpi and all other features to be similar. *Pilopius* Casey is here placed as the junior synonym of *Ctenisodes* Raffray. NEW SYNONYMY

Cylindractus ludovicianus (Brendel, 1893)

At the time of my revision of *Cylindractus* (Chandler, 1988), I was unable to borrow the missing male holotype of *C. comes* Casey (1893) from Florida in the Casey Collection at the Smithsonian Institution. The identity of this species was attached to one species that is commonly collected in Florida. The holotype male was recently returned, and was found unfortunately to be conspecific with another species commonly taken in Florida, *C. ludovicianus* (Brendel) (1893), with this name being described in October and the Casey name in November of 1893. *C. comes* Casey is here treated as the junior synonym. NEW SYNONYMY. Label data: //Enterprise, V-15, Fla./ Casey bequest 1925/ TYPE USNM 38734// [USNM].

This leaves "*Cylindractus comes*" of Chandler (1988) without a name, and I here propose the name *Cylindractus seminole* Chandler, NEW SPECIES.

Cylindractus seminole Chandler, new species

Length 1.35-1.50. Males with metasternum bearing two widely spaced tubercles equidistant between meso- and metacoxae, tubercles in line with lateral margins of mesocoxae directed ventrally; sternites II-V flattened medially, VI with deep circular foveole at apex; protochanters with blunt spine ventrally, metatrochanters with broad recurved flange on posterior margin near base. Aedeagus with median piece of dorsal lobe short and broadly bilobed, lateral pieces

elongate, truncate apically with lateral margins sharply curved ventrally; ventral lobe truncate at apex, with large broadly rounded preapical tubercles (Fig. 20 in Chandler, 1988).

Measurements of holotype male.—metasternal tubercles 0.07 posterior to mesocoxae, 0.07 anterior to metacoxae, tubercles 0.03 long, protrochanteral spine 0.03 long, aedeagus 0.22 long.

Specimens examined.—12: HOLOTYPE, Florida, Highlands Co., 3 mi E Lake Placid, Lake Istokpoga shore, I-11-1975, W. Suter, fern island (FMNH). PARATYPES: *Florida*: Dade Co., 1 ♂, Everglades Nat. Park, Anhinga Trail, VII-17-1973, C. W. O'Brien, UV trap. Marion Co., 1 ♂, Ocala National Forest, Hopkins Prairie, VI-9-1994, E. J. Ford, UV trap. Monroe Co., 1 ♂, 5 mi N Flamingo, Snake "Bight" Trail, VIII-27-1965, W. Suter, grassy compost, sawgrass-mangrove area. *Mississippi*: Hancock Co., 1 ♂, 2 mi N Waveland, Bayou LaCroix, V-23-1982, W. H. Cross, blacklight at edge of marsh. Harrison Co., 3 ♂, 4 ♀, Newman Lumber Company, Landon, V-7/VIII-11-1969, UV trap. All paratypes are in my collection.

This species is distinct with the widely spaced metasternal tubercles posterior to the lateral margins of the mesocoxae, and the large lateral preapical tubercles of the ventral aedeagal lobe. The presence of the apical foveole on sternite VI and metasternal tubercles places this species near the lineage centered on *Cylindrarctus longipalpis* (Brendel).

Dalmosanus Park, 1952

Dalmosanus Park currently contains two species from Veracruz, the type species *D. inoculus* Park and *D. acuta* (Park), placed here with the synonymy of *Triangusella* Park (1952) by Grigarick and Schuster (1980). These two species represent the tip of the iceberg in what appears to be another "large genus of small beetles" in eastern and southern Mexico and Central America, and now appear to be represented in the southeastern United States, though under the name *Pygmactium* Schuster and Grigarick (1968). Grigarick and Schuster (1980) provided good generic analyses and figures of these two genera in their treatment of the North and Central American Euplectini, but somehow did not notice that they were identical in all critical details. *Pygmactium* is here placed as the junior synonym of *Dalmosanus* Park. NEW SYNONYMY.

Decarthron consanguineum (Motschulsky, 1855), new comb.

There are two specimens on a single card to be treated as syntypes of *Bryaxis consanguinea* Motschulsky (1855): a male of *Decarthron robustum* (Motschulsky) on the left, and a female conspecific with *D. monoceros* (Schaufuss) on the right. Type data: // [small light green square]/ Obispo [light green paper]/ *Bryaxis consanguinea* Motch. Panama [dark green paper]/ // [ZMUM].

The short description indicates that the lateral pronotal foveae are

distinct and as large as the median fovea, which best fits the *Decarthron* specimen on the right. I here choose this specimen as the LECTOTYPE, and the specimen of *D. robustum* on the left as a PARALECTOTYPE. *D. consanguineum* is now the senior synonym of *Bryaxis monoceros* Schaufuss (1882), and its previously recognized junior synonym *D. euspinifrons* Park (1942). NEW SYNONYMY.

***Decarthron formiceti* (LeConte, 1849)**
and *Decarthron velutinum* (LeConte, 1849)

Park (1958) presented a sketchy review of the North American *Decarthron*, and figured the genitalia of many of the species. However, there were a few types that he did not examine, with consequences that can be imagined. A critical species has been *Bryaxis formiceti* LeConte (1849), described from Pennsylvania but widely distributed in the eastern United States. Park did not examine the holotype male, but figured the male genitalia (1958) of what he believed was *formiceti*. As it turns out, *D. formiceti* is conspecific with *D. rayi* Park from Illinois, sharing identical modifications of the male femora and aedeagi. NEW SYNONYMY. Data of holotype male of *formiceti*: // [pink disc]/ Type 6155/ *B. formiceti*// [MCZC].

This action leaves *formiceti sensu* Park without a name. Brendel (1865b) synonymized *B. velutinum* LeConte (1849) with *formiceti*, placing *formiceti* as the senior synonym, and this synonymy has prevailed to the present time. *B. velutinum* was based on two females from New Orleans, and Park's "*formiceti*" is quite common along the Caribbean coast from Texas to Florida. Based on the shared subtle characters of the size of the pronotal foveae, body size, and the fact that this taxon is very common in the New Orleans area while *formiceti* hasn't yet been taken there, I propose to use the name *D. velutinum* (LeConte) for *formiceti sensu* Park. NEW STATUS. Syntype data, two females: // [orange disc]/ Type 6156/ *B. velutinum*// [MCZC].

The male holotype of *D. seriepunctatum* Brendel (1893) was examined and the genitalia extracted. It was found to be also conspecific with *D. formiceti* LeConte (1849), and is here recognized as a junior synonym. NEW SYNONYMY. Type data: // Ten/ ♂ / Brend/ Horn Coll H9375/ *D. seriepunctatum* Brend./ Type #8329 *Decarthron seriepunctatum* B., Carl Farr Moxey 29.VI.1962//.

***Decarthron marinum* Brendel, 1893**

The syntypes of this Brendel species from coastal Mississippi and Louisiana were not examined when Park conducted his review of *Decarthron* (Park, 1958). I extracted the genitalia of the male lectotype of *D. marinum* Brendel (1893), and found it to be identical with that of *D. diversum* Park (1958), described from coastal Florida, with *diversum* being the junior synonym. Type data of *marinum*: // Miss./ ♂ / Brend/ Horn Coll. H3977/ *D. marinum* Brend/ Lectotype desig. Moxey 1962/ 29.VI.1962 TYPE #8328 *Decarthron marinum* B., Carl Farr

Moxey // [ANSP]. NEW SYNONYMY.

Decarthron robustum (Motschulsky, 1855), new comb.

There are three types of *Metaxis robusta* Motschulsky (1855) on the card, with the first and second (in line from the card apex) being a male and female of one species of *Decarthron*, and the third being a female of a different species of *Decarthron*. The male closest to the card apex is here chosen as the LECTOTYPE, and is a species commonly collected in Panama. The other two specimens are designated as PARALECTOTYPES. Type data: // [small light green circle]/ Obispo [light green paper]/ *Metaxis robustula* [sic] Motch. Panama [dark green paper]// [ZMUM].

Males of *D. robustum* lack modifications of the legs, but the tenth antennomeres are elongate and rectangular, unlike the short and transverse tenth antennomeres of most other species.

Euphalepsus Reitter, 1833, and the Subtribe BARADINA

Euphalepsus Reitter (1883) is a large Neotropical genus that has been an enigma for some time. The first definitive placement of this genus was by Sharp (1887) in the Batrisini, where it has been maintained by all subsequent workers. However, *Euphalepsus* does not possess the critical feature of the dorsally and ventrally emarginate apex of the first antennomeres, which is used to separate members of the Batrisitae from the Goniaceritae, and the male genitalia are of the type found in some members of the Goniaceritae, not the Batrisitae.

Jeannel (1962) described the genus *Tetrasemus* based on a single species from Tucumán, Argentina. He placed this genus, without comment, in the Brachyglutini, and his figure of the type species looked strikingly similar to that of a *Euphalepsus*. In Paris I was able to examine the type, *T. delamarei* Jeannel, and confirmed that both genera represent the same taxon. NEW SYNONYMY.

I was also able to examine the type species, *Barada mucronata* Raffray from Venezuela, of the monotypic genus *Barada* Raffray (1891). I found that though the holotype was badly rubbed, it was unquestionably also a member of *Euphalepsus*. *Barada* is the type genus of the problematic subtribe Baradina in the Brachyglutini, created by Park (1951) to hold this genus with slightly separated metacoxae, unusual in the Brachyglutini where all (except some Eupseniina) have the metacoxae widely separated. He apparently never saw the type of this species, as it would have been immediately obvious that it was a member of *Euphalepsus*. *Barada* Raffray is here placed as the junior synonym of *Euphalepsus* Reitter. NEW SYNONYMY.

Euphalepsus was clearly misplaced in the Batrisitae, but yet is not closely allied to any genus in the Goniaceritae. The long second visible sternite and very short first visible sternite, relatively flat metacoxae, and antennae with the first antennomeres normal in length, place this genus in the Brachyglutini. Here it is readily distinguished from the

other subtribes except Eupseniina by the closely approximate metacoxae and distinctive body form. *Euphalepsus* is somewhat similar to the Oriental genus *Harmophorus* Motschulsky (Arnyllini), with the fused tergites and sternites of the strongly rounded abdomen and general body form, but the structure of the genitalia is very different, much more similar to the asymmetric and tubular genitalia of some Proterini, and the similarity to *Harmophorus* may be due to convergence. The Baradina is maintained as a valid subtribe to hold this enigmatic genus and the closely related Neotropical genus, *Phalespoides* Raffray.

Eupsenius dilatatus Motschulsky, 1856

Motschulsky (1856) described *Eupsenius dilatatus* from Mobile, Alabama, and this species has never been treated since its description. Motschulsky also mentioned *E. rufus* from Mobile in this paper, but since this name lacked any semblance of a description, it was a *nomen nudum*. However, Motschulsky sent a specimen of "*rufus*" to LeConte, and LeConte (1863) validated this name by describing the species based on the specimen sent by Motschulsky. Holotype female data: / / [orange disc] / Type 6150 / *Eupsenius rufus* Mots. Mobile / / [MCZC].

The card bearing the types of *dilatatus* has three specimens, with the first and third specimens being conspecific females and members of *Eupsenius*, and the remaining specimen is a member of *Actiastes globiferum* (LeConte). Type data: / / [small light green square] / Nord. Am. / nov. sp. / *Eupsenius dilatatus* Motch. Am. bor. [dark green paper] / / [ZMUM]. These two specimens could not be separated from the holotype of *Eupsenius rufus* LeConte, matching color, size, and pronotal form, and all appear to be members of a single series. *E. rufus* LeConte is here treated as the junior synonym of *E. dilatatus* Motschulsky. NEW SYNONYMY.

Eurhexius canaliculatus (Motschulsky, 1855), new comb.

The female holotype of *Trichonyx canaliculatus* Motschulsky (1855) from Obispo, Panama, was examined and found to be a member of *Eurhexius* Sharp, and the senior synonym of *E. zonalis* Park (1942), described from Barro Colorado Island in Panama. NEW SYNONYMY. Type data: / / [small light green square] / Obispo [light green paper] / *Trichonyx canaliculatus* Motch. Panama [dark green paper] / / [ZMUM].

Harmophola adusta (Motschulsky, 1855), new comb.

The female holotype of *Euplectus adustus* Motschulsky (1855) is clearly a member of *Harmophola* Raffray, for the first record of this South American genus from Central America. Type data: / / [small light green square] / Obispo [light green paper] / *Euplectus adustus* Motch. Panama [dark green paper] / / [ZMUM].

I have a small series of this species from Altos de Majé, Panama Province, Panama, collected from rotten wood.

Iteticus cylindricus (Motschulsky 1855), new comb.

The female holotype of *Batrisus cylindricus* Motschulsky (1855) was found to be a member of *Iteticus* Raffray (1904). Type data: // [small light green square]/ Obispo [light green paper]/ *Batrisus cylindricus* Motch. Panama [dark green paper]// [ZMUM].

Motschtyrus pilosus (Motschulsky, 1855), new genus, new comb.

Figs. 1-2

The holotype female of *Tychus pilosus* Motschulsky (1855) was found to represent an undescribed genus of Tyrini, subtribe Hamotina. This new genus is given the name *Motschtyrus*, gender masculine, and the type species is here designated as *Tychus pilosus* Motschulsky.

Motschtyrus is characterized by: Length 1.8 mm. Head with small vertexal foveae, foveae nude, lacking frontal fovea; antennal tubercles close and prominent; frontal rostrum low; maxillary palpi moderate in size, third segments small, slightly longer than wide; fourth segments swollen, widest at middle, lateral margins evenly and broadly rounded, inner margins smoothly rounded, lacking a sulcus; antennal club formed by apical three antennomeres.

Pronotum with length and width subequal; shallow and small median antebasal fovea faint, lacking lateral antebasal foveae; prosternum very short, lateral prosternal foveae widely separated. Elytra with two small basal foveae; lacking discal stria. Median mesosternal fovea broadly forked; lateral mesosternal foveae broadly forked, forks subequal in size; lacking lateral mesocoxal foveae; with single median metasternal fovea; metasternum longitudinally and shallowly impressed at middle.

Abdomen with first visible tergite longer than rest of abdomen, constricted at base; discal carinae of first tergite short and widely separated, near lateral margins; second visible sternite deeply constricted and setose across base. Legs with third tarsomeres longest, about as long as other two tarsomeres combined.

Male with small thorn on protrochanters near ventroapical margin. Sternites broadly rounded, sternite VII not visible.

Type data.— // [small light green square]/ Obispo [light green paper]/ *Tychus pilosus* Mots. Panama [dark green paper]// [ZMUM]. A male specimen in my collection bears this data: PANAMA, Canal Area, Barro Colorado Island, IV-24-1983, H. Wolda, UV light.

Relationships.—The small third segments of the maxillary palpi are only slightly longer than wide, and much narrower than the swollen fourth segments. This best places this genus in the subtribe Hamotina. *Motschtyrus* can't be placed near any genus at this time. The form of the palpi, long first visible tergite, and constriction of the abdomen at the base serve to readily recognize this genus.

Nisaxis Casey, 1886

Nisaxis Casey (1886) currently holds four species that are found in along the eastern and southern seacoast from Connecticut to Tamaulipas, and has also been recorded from a few inland states and Caribbean islands. Park (1945) described the new genus and species *Dranisaxa gloydi* from coastal Oaxaca, Mexico, and the only comparative statement made with other genera was the brief comment that it shared the lack of vertexal foveae with *Nisaxis*. The holotype male [FMNH] of *D. gloydi* was examined, and I found that it and several undescribed species of *Nisaxis* from coastal areas of Mexico completely intergrade in the development of the male characters, and share the unique features of lack of vertexal foveae, presence of punctiform pronotal foveae, and weak impressions of the male fourth tergites. The two genera cannot be separated, and *Dranisaxa* Park is here recognized as the junior synonym of *Nisaxis* Casey. NEW SYNONYMY.

Oropus striatus (LeConte, 1874)

Casey (1908) described two species of *Oropus* from Metlakatla, British Columbia: *keeni* Casey and *brevipennis* Casey. Schuster and Grigarick (1960) commented on the problems of separating *keeni* from *striatus* (LeConte), and did so principally by size and slight differences in the form of the impression on tergite IV of the male. They also suspected that *brevipennis* was simply based on females of *keeni*. Park and Wagner (1962) treated all of these species, but listed only the type localities for the two Casey taxa, while treating *striatus* as occurring from western Oregon to southwestern British Columbia.

For some time I have been unable to separate *striatus* and *keeni*, while possessing several good series of *Oropus* from the Pacific Northwest encompassing the size and male tergal variations mentioned by Schuster and Grigarick. Examination of cleared and dissected specimens covering this variation has not revealed any features for grouping the specimens, and examination of the types reveals only a small difference in size. The type series of *keeni* consists of four males from Metlakatla, and two males from "Br.C.", while the type series of *brevipennis* consists of six females from Metlakatla, apparently from the same original series as *keeni*. *O. keeni* Casey and *O. brevipennis* Casey, are here recognized as junior synonyms of *Trichonyx striatus* LeConte. NEW SYNONYMIES.

Panaramecia tropicalis (Motschulsky, 1855), new comb.

The two syntype females of *Euplectus tropicalis* Motschulsky (1855) are members of *Panaramecia* Park (1942). Type data: // [small light green square]/ Obispo [light green paper]/ *Euplectus tropicalis* Motch. Panama [dark green paper]/ / [ZMUM].

These specimens were compared with the male paratypes of *Panaramecia williamsi* Park (1942) from Barro Colorado Island, Panama [FMNH], and are judged to represent the same species, with the name of Park being the junior synonym. NEW SYNONYMY.

Phamisus Aubé, 1844

Aubé (1844) described *Phamisus* for an unusual species from Colombia covered with dense setae. Later Motschulsky (1855) described the genus *Canthoderus* from Panama, and placed in it a single species, *villosus* Motschulsky, from Obispo. Type data: // [small light green square]/ Obispo [light green paper]/ *Canthoderus villosus* Motch. Panama [dark green paper]/ / [ZMUM]. While this latter genus was readily placed in the group of genera that were eventually segregated into the tribe Jubini, it has subsequently always been placed uncertainly in synonymy with *Stratus* Schaufuss (1872), until definitely so by Chandler (1997).

I have examined the type species of these three genera (*Phamisus reichenbachii* Aubé from Colombia, *Canthoderus villosus* Motschulsky from Panama, and *Stratus ursinus* Schaufuss from Mexico), and found all to belong to a single genus that is readily recognized by its dense setae, form of the head and pronotum, and form of the antennae, with the senior name being *Phamisus* Aubé. NEW SYNONYMY.

Pselaphus bellax Casey, 1893

When Park and Wagner (1962) recorded *Pselaphus ulkei* Bowman (1934) from Terrace, British Columbia, they compared this species with *P. bellax* Casey (1893) and found them to be very close but distinct, with the former having a western distribution and the latter being east of the Appalachians. They separated the two taxa by differences in antennomere lengths, size of the aedeagus, and curvature of one of the spines of the apical armature of the aedeagus. I have examined the male genitalia of *bellax* specimens from several eastern localities and Manitoba, and specimens from the type series [ICCM] of *ulkei* from North Dakota and Idaho, and have been unable to distinguish them by any feature, including the antennomeres. The differing degrees of rotation of the curved medial spine of the apical armature forms different outlines as the angle of the lateral view is altered, but is always of the same morphology. *P. ulkei* Bowman is here placed as a junior synonym of *P. bellax* Casey. NEW SYNONYMY.

Pselaptus oedipus (Sharp, 1887)

Sharp (1887) described *Bryaxis oedipus* and *B. trimioides* from Guatemala, and were both subsequently placed with question in *Cryptorhinula* Schaufuss by Raffray (1904, p. 211). The type species of this genus, *C. nodifera* Schaufuss of Brazil, is readily recognized by the lack of pronotal foveae, the elytra with two basal foveae and a short

discal stria, and the frons abruptly declivous. Both of Sharp's species lack foveae, or the lateral foveae are minute, have only faint basal impressions on the elytra, lack an elytral stria, and the head apex is formed differently. Examination of the holotype male of *B. oedipus* [BMNH], revealed that it is best placed in the genus *Pselaptus* LeConte, and though lacking obvious male modifications of the head, it is otherwise similar to the type species of this genus, *P. belfragei* LeConte. NEW COMBINATION. *B. trimioides* is a member of a diverse group in Central America, *Xybarida* Raffray [see under *Xybarida trimioides*].

Reichenbachia pruinosa (Motschulsky, 1855), new comb.

The card bearing the types of *Bryaxis pruinosa* Motschulsky (1855) has four specimens on it: two male *Reichenbachia*, a *Dalmophysis*, and an unplaced member of the Natypleurina. The brief description of Motschulsky (1855) indicates that the pronotum has antebasal foveae, which means that only the two *Reichenbachia* can be considered as types. Type data: // [small light green square]/ Obispo [light green paper]/ *Bryaxis pruinosa* Motch. Am. cent. [dark green paper]/ [ZMUM]. This taxon is conspecific with *R. bierigi* Park (1946), known from Panama and Costa Rica, and a paratype of this taxon [FMNH] was examined to confirm the synonymy. NEW SYNONYMY.

A second Motschulsky species, *Bryaxis macrura* Motschulsky (1855), is also placed as a synonym of *R. pruinosa*. There are two types of this species on the card, with the specimen on the left being a male of *R. pruinosa*, and the specimen on the right being a male of *Caligocara* Park, possibly *C. carinifera* Park. Type data: // [small light green square]/ Obispo [light green paper]/ *Bryaxis macroura* [sic] Motch. Panama [dark green paper]/ [ZMUM].

Motschulsky clearly describes the male features of the *Reichenbachia*, while the *Caligocara* was thought to be a female. The best description is for the male *Reichenbachia*, and so I chose it as the LECTOTYPE, and the *Caligocara* as the PARALECTOTYPE. This fixes the identity of this species, and as first reviser I chose to treat it as a junior synonym of *B. pruinosa* Motschulsky. NEW SYNONYMY.

Reichenbachia intacta (Sharp, 1887)

Sharp (Feb. 1887) described *Bryaxis intacta* based on a male from Guatemala, and this holotype was borrowed for examination. Type data: // ♂ *Bryaxis intacta*. Type D.S. Cahabon. Guat. Champion/ Type [red-bordered circle]/ Cahabon, Vera Paz, Champion/ B.C.A. Col. II 1, *Bryaxis intacta* Sharp/. Schaufuss (mid-year 1887) described *B. sarcinaria* based on a male from Yucatan, Mexico. I examined the type in Paris, and have a specimen that was compared with it.

This species is readily recognized by the form of the greatly enlarged male fifth antennomeres. Park (1945, p. 350) suspected that these two names represented the same species, and that there would be a question of priority because both were described in the same year.

The two types clearly represent the same species, and while the precise date for the Schaufuss paper can't be established, it was described in the third issue of *Tijdschrift voor Entomologie* for 1887, and was probably published no earlier than August based on the date of receipt of October 8, 1887 of this issue at Harvard University. Sharp's description was clearly published in February of 1887, and is here designated as the senior synonym. NEW SYNONYMY.

***Reichenbachia rubricunda* (Aubé, 1844)**

Aubé (1844) described *Bryaxis rubricunda* from Pennsylvania based on material sent to him by H. R. Schaum, with the collection of Schaum later incorporated into the Clemens Müller Collection, now in the Zoologische Staatssammlung in Munich [ZSMC]. This taxon has not been accurately placed since its description. I did borrow the Clemens Müller specimens of *rubricunda* from Munich, but found five species to be present: *Reichenbachia divergens* (LeConte) (2♂, 1♀), *R. corporalis* Casey (1♂), *R. gemmifer* (LeConte) (1♂, 1♀), an undescribed species of *Reichenbachia* (1♂), and a female *Brachygluta*. I wasn't sure that the types were present in this material, and left this taxon as an "unplaced species" (Chandler 1989).

Recently I visited the Zoologische Staatssammlung, and searched the collection for the types of *rubricunda*. All other types of Aubé that were based on specimens of Schaum were present and accurately labeled as such, indicating to me that very likely the types of *rubricunda* were indeed present in the material I had seen. While not presenting much useful information, Aubé compared *rubricunda* with *R. opuntiae* (Schmidt-Göbel) of Europe, placed the length at 1.5 mm, stated there were two specimens, and mentioned that the males have a small spine at the mesal apex of the mesotibiae. *R. gemmifer* (LeConte) is about 1.6 mm, fits Aubé's description, is generally similar to *R. opuntiae*, the males have a small mesotibial spine, and is represented in the Müller material by two specimens. The other species of *Reichenbachia* in the Müller series identified as *rubricunda* have the male mesotibial spines large, are larger in size, and are not represented by the correct number of specimens. The two specimens that are conspecific with *gemmifer* are here recognized as the syntype series of *Bryaxis rubricunda*, and this name is the senior synonym to *B. gemmifer* LeConte. NEW SYNONYMY.

***Trimicerus cornigerus* (Motschulsky, 1855), new comb.**

The two male syntypes of *Bryaxis cornigera* Motschulsky (1855) were examined, and were found to be members of *Trimicerus* Motschulsky (see next species). Type data: // [small light green square]/ Obispo [light green paper]/ *Bryaxis cornigera* Motch. Panama [dark green paper]// [ZMUM].

The two males are in good condition, and are conspecific with *Batrybraxis panamensis* Park (1942), described from Barro Colorado

Island in Panama. The latter species is the junior synonym. NEW SYNONYMY.

***Trimicerus pacificus* Motschulsky, 1855**

Trimicerus was proposed by Motschulsky (1855) to hold a single species, *pacificus*, from Panama. Reitter (1882) later described the genus *Batrybraxis*, and currently there are seven species included from Mexico to Brazil. *Batrybraxis* Reitter is clearly congeneric with *Trimicerus* Motschulsky, and is here treated as the junior synonym. NEW SYNONYMY. Type data for male holotype: // [small light green square]/ Obispo [light green paper]/ *Trimicerus pacificus* Motch. Panama [dark green paper]/ [ZMUM]. Also, *B. bowmani* Park (1942), described from Barro Colorado Island in Panama, is conspecific with *T. pacificus*, and is here placed as a junior synonym of that species. NEW SYNONYMY.

***Trimiomelba dubia* (LeConte, 1849)**

Trimiomelba Casey currently holds four species, with the type species being *Euplectus dubius* LeConte (1849). This widespread eastern species is based upon a holotype male from the Nakutshi Valley in Georgia. Type data: // [orange circle]/ Type 6183/ *E. dubius* Lec// [MCZC]. Motschulsky (1856) described *Trimium americanum*, taken in Mobile, Alabama, and sent a female specimen to LeConte. This specimen is recognized as a syntype, with the type data: // [orange disc]/ *Trimium americanus* Motsch. Mobile/ HOLOTYPE MCZ 33310/ SYNTYPE *Trimium americanum* Motschulsky// [MCZC], and is here designated as the LECTOTYPE.

LeConte (1878) later added *Trimium convexulum*, based on a female holotype from Tampa, Florida. Type data: // Tampa Fla. 10.4/ 1512/ Type 6182/ HOLOTYPE *Trimium convexulum* LeConte// [MCZC]. The final species placed in this genus is *Trimiomelba laevis* Casey (1897), based on females from the District of Columbia. Syntype data: // D.C./ Casey bequest 1925/ Type USNM 38650//.

All three species based on female types are clearly members of the genus *Trimiomelba*, and there is only one species of this genus to be found in eastern North America. The male features of the vertex are unique, and permit ready recognition of this species throughout its range. The three names above are here placed as junior synonyms of *Trimiomelba dubia* (LeConte). NEW SYNONYMIES.

***Tyrus humeralis* (Aubé, 1844) and *Tyrus semiruber* Casey, 1897**

Aubé (1844) described *Hamotus humeralis* from "Caroline du Nord." This species was subsequently transferred to *Tyrus* by LeConte (1849), and other additions for eastern North America were: *T. compar* LeConte (1849) from Georgia, Carolina, and the Missouri Territory; *T. semiruber* Casey (1897) from Michigan; and *T. consimilis* Casey (1897)

from Kentucky and Indiana.

LeConte (1863) correctly synonymized *compar* with *humeralis*, but when Casey (1897) revised this genus, he stated that *humeralis* was confined to the northeastern states and Canada, despite being based on a specimen from North Carolina, while those specimens from the Midwest and southern states were considered to be *consimilis*. While aware of this problem, I followed existing usage of these names in the recent catalog of North American Pselaphidae (Chandler, 1997), as I had not then examined the oldest and therefore the most critical type (that of *H. humeralis*).

I have now seen all of the types. The type of *T. humeralis* bears the data: // [small blue square]/ Aubé Type/ Carolina/ Sammlung Cl. Müller/ HOLOTYPE Hamotus humeralis Aubé// [ZSMC]. *T. consimilis* Casey is a junior synonym of *T. humeralis*, and this species is primarily found in the South and Midwest (records under *T. consimilis* in Chandler, 1997). NEW SYNONYMY. Syntype data of *consimilis*: // Ky/ ♀ [a male!]/ Casey bequest 1925/ Type USNM 38764/ consimilis// [USNM], and is here designated as the LECTOTYPE. A second syntype should be from Indiana, but wasn't present in the Casey collection.

The species that has been treated by authors as "*Tyrus humeralis*" has an available name, *T. semiruber* Casey, and this species is typically found in the Northeastern United States, northern Midwest, and eastern Canada (records under *T. humeralis* in Chandler, 1997). Syntype data: //Eagle Har. 19.6 La. Sup. [Michigan]/ ♂ [a female!]/ Casey bequest 1925/ Type USNM 38763/ semiruber// [USNM].

***Tyrus corticinus* (Casey, 1887)**

The description of the widespread western species, *T. corticinus* (Casey) (1887), is based on 7 specimens (5 ♂, 2 ♀) from Lake Tahoe, California. Type data: // Cal [with two lines through the "l" = Lake Tahoe]/ Casey bequest 1925/ Type USNM 38762/ Pytna corticina// [USNM]. Ten years later Casey (1897) added another species from the western states, *T. carinifer*, based on a holotype female from southwestern Utah. Type data of *carinifer*: // Ut/ ♂ [a female!]/ Casey bequest 1925/ Type USNM 38761/ carinifer// [USNM]. I have examined the holotype of *carinifer*, and found it to be a typical *corticinus*, with the carina on the profemora a little longer than usual, but not remarkably so. I here place *carinifer* as the junior synonym of *corticinus*. NEW SYNONYMY.

***Xybarida trimioides* (Sharp 1887)**

Sharp (1887) described *Bryaxis trimioides* from Guatemala, and it was subsequently placed in *Cryptorhinula* Schaufuss with question by Raffray (1904). However, examination of the type series [BMNH] revealed that it is clearly not a member of this genus (see comments under *Pselaptus oedipus*), and is here placed in the widespread but

poorly known Neotropical genus *Xybarida* Raffray, (1897). NEW COMBINATION.

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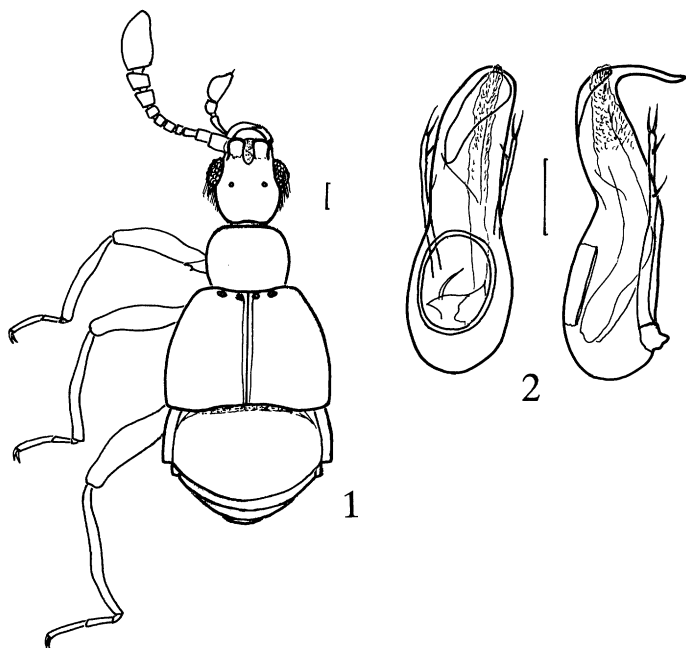
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FIGURES 1-2. *Motschtyrus pilosus* (Motschulsky). Line = 0.1 mm. 1, Dorsal habitus; 2, Dorsal and left lateral view of aedeagus